

## AMENDMENT

### In the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

### Listing of Claims

1. (Currently Amended) A system of carrier transport traffic management, comprising:
  - a fabrication tool;
  - a host computer, connected to the fabrication tool, configured to acquire an available ~~number~~ capacity of control jobs, process jobs or internal buffer sections for the fabrication tool upon detecting a loadport of the fabrication tool is available;
  - and
  - a material transport system, connected to the host computer, configured to receive the available ~~number~~ capacity of the control jobs, process jobs or internal buffer sections corresponding to the fabrication tool, acquire a carrier identity corresponding to a carrier, acquire a required ~~number~~ capacity of the control jobs, process jobs or internal buffer sections corresponding to the carrier, and issue a load command to ~~an automated material handling system (AMHS) the~~ transport system to transport the carrier to the fabrication tool if the available ~~number~~ capacity of the control jobs, process jobs or internal buffer sections

exceeds or equals to the required ~~number~~ capacity of the control jobs, process jobs or internal buffer sections.

2. (Currently Amended) The system of claim 1 wherein the material transport system further sends an advisory to an operator if the available ~~number~~ capacity of the control jobs, process jobs or internal buffer sections is less than the required ~~number~~ capacity of the control jobs, process jobs or internal buffer sections.

3. (Original)The system of claim 1 wherein the fabrication tool provides a plurality of services compliant to a 300mm semiconductor equipment and material international (SEMI) standard.

4. (Previously Presented) The system of claim 1 wherein the carrier identity is acquired from an operator.

5-8. (Cancelled)

9. (Currently Amended) The system of claim 1 wherein the ~~[[the]] available number capacity of control jobs are acquired by executing a 300mm semiconductor equipment and material international (SEMI) E94 service~~ a software service resident in the fabrication tool, and each control job manages process job sequence of a number of the process jobs.

10. (Currently Amended) The system of claim 1 wherein ~~[[the]] the available-number capacity of control process jobs are acquired by executing a 300mm semiconductor equipment and material international (SEMI) E40 service a software service~~ resident in the fabrication tool, and each process job is provided for association with at least one wafer lot and to specify a particular recipe.

11. (Currently Amended) The system of claim 1 wherein the internal buffer sections ~~are divided into respectively correspond to one of~~ three categories, production, side dummy and fill dummy~~[[ and]], the available-number capacity of internal buffer sections with the corresponding categories are acquired by executing a 300mm semiconductor equipment and material international (SEMI) E87 service a software service~~ resident in the fabrication tool, and the internal buffer sections will intake, process and store the carrier.

12. (Currently Amended) A method of carrier transport traffic management, the method comprising using a computer to perform the steps of:

- receiving an available-number capacity of control jobs, process jobs or internal buffer sections corresponding to a fabrication tool from a host computer;
- acquiring a carrier identity corresponding to a carrier;
- acquiring a required-number capacity of the control jobs, process jobs or internal buffer sections corresponding to the carrier identity; and
- issuing a load command to ~~an automated material handling system (AMHS) a transport system~~ to transport the carrier to the fabrication tool if the available-number capacity of the control jobs, process jobs or internal buffer sections exceeds or

equals to the required ~~number capacity~~ of the control jobs, process jobs or internal buffer sections.

13. (Currently Amended) The method of claim 12 further comprising a step of sending an advisory to an operator if the available ~~number capacity~~ of the control jobs, process jobs or internal buffer sections is less than the required ~~number capacity~~ of the control jobs, process jobs or internal buffer sections.

14. (Original) The method of claim 12 wherein the fabrication tool provides a plurality of services compliant to a 300mm semiconductor equipment and material international (SEMI) standard.

15. (Previously Presented) The method of claim 12 wherein the carrier identity is acquired from an operator.

16-19. (Cancelled)

20. (Currently Amended) The method of claim 12 wherein ~~[[the]]~~ the available ~~number capacity~~ of control jobs are acquired by executing ~~a 300mm semiconductor equipment and material international (SEMI) E94 service~~ a software service resident in the fabrication tool, and each control job manages process job sequence of a number of the process jobs.

21. (Currently Amended) The method of claim 12 wherein the available-number capacity of control process jobs are acquired by executing a 300mm semiconductor equipment and material international (SEMI) E40 service a software service resident in the fabrication tool, and each process job is provided for association with at least one wafer lot and to specify a particular recipe.

22. (Currently Amended) The method of claim 12 wherein the internal buffer sections are divided into respectively correspond to one of three categories, production, side dummy and fill dummy[[ and]], the available-number capacity of internal buffer sections with the corresponding categories are acquired by executing a 300mm semiconductor equipment and material international (SEMI) E87 service a software service resident in the fabrication tool, and the internal buffer sections will intake, process and store the carrier.

23. (Currently Amended) A machine-readable storage medium for storing a computer program which when executed performs a method of carrier transport traffic management, the method comprising the steps of:

receiving an available-number capacity of control jobs, process jobs or internal buffer

sections corresponding to a fabrication tool from a host computer;

acquiring a carrier identity corresponding to a carrier;

acquiring a required-number capacity of the control jobs, process jobs or internal buffer

sections corresponding to the carrier identity; and

issuing a load command to an automated material handling system (AMHS) a transport system to transport the carrier to the fabrication tool if the available-number

capacity of the control jobs, process jobs or internal buffer sections exceeds or equals to the required ~~number~~ capacity of the control jobs, process jobs or internal buffer sections.

24. (Currently Amended) The machine-readable storage medium of claim 23, wherein the method further comprises a step of sending an advisory to an operator if the available ~~number~~ capacity of the control jobs, process jobs or internal buffer sections is less than the required ~~number~~ capacity of the control jobs, process jobs or internal buffer sections.

25. (Cancelled)

26. (Previously Presented) The computer-readable storage medium of claim 23 wherein the carrier identity is acquired from an operator.

27-30. (Cancelled)

31. (Currently Amended) The computer-readable storage medium of claim 23 wherein [[the]] the available ~~number~~ capacity of control jobs are acquired by executing ~~a 300mm semiconductor equipment and material international (SEMI) E94 service~~ a software service resident in the fabrication tool, and each control job manages process job sequence of a number of the process jobs.

32. (Currently Amended) The computer-readable storage medium of claim 23, wherein the available ~~number capacity~~ of ~~control process~~ jobs are acquired by executing a ~~300mm semiconductor equipment and material international (SEMI) E40 service~~ a software service resident in the fabrication tool, and each process job is provided for association with at least one wafer lot and to specify a particular recipe.

33. (Currently Amended) The computer-readable storage medium of claim 23, wherein the internal buffer sections ~~are divided into~~ respectively correspond to one of three categories, production, side dummy and fill dummy[[ and ]], ~~the available number capacity of~~ internal buffer sections with the corresponding categories are acquired by executing a ~~300mm semiconductor equipment and material international (SEMI) E87 service~~ a software service resident in the fabrication tool, and the internal buffer sections will intake, process and store the carrier.